ABSTRACT

A channel spreading method in a CDMA communication system which spreads a pair of symbols obtained by repeating one symbol with a quasi-orthogonal code having a given length to transmit the spread symbols through a first antenna and spreads said symbol and an inverted symbol of said symbol with said quasi-orthogonal code to transmit the spread symbols through a second antenna. The method comprises spreading one of said pair of symbols with a portion of said quasi-orthogonal code and spreading another symbol of said pair of symbols with a remaining portion of said quasi-orthogonal code; and spreading said symbol with a portion of said quasi-orthogonal code and spreading said inverted symbol with the remaining portion of said quasi-orthogonal code.